Boloria frigga saga (Frigga Fritillary)

Report Date: January 13, 2016

Priority 1 Species of Greatest Conservation Need (SGCN)

Class: Insecta (Insects)

Order: Lepidoptera (Butterflies, Skippers, And Moths)

Family: Nymphalidae (Brushfooted Butterflies)

General comments:

proposed endangered 2014; only 1 known population; restricted to northern Maine and habitat specialized but still partially unsurveyed; absent at several seemingly appropriate locales

Species Conservation Range Maps for Frigga Fritillary:

Town Map: <u>Boloria frigga saga_Towns.pdf</u>
Subwatershed Map: <u>Boloria frigga saga_HUC12.pdf</u>

SGCN Priority Ranking - Designation Criteria:

Risk of Extirpation:

Maine Status: Endangered

State Special Concern or NMFS Species of Concern: NA

Recent Significant Declines: NA

Regional Endemic: NA

High Regional Conservation Priority: NA

High Climate Change Vulnerability:

Vulnerability: 3, Confidence: Medium, Reviewers: Decided in Workshop (W)

Understudied rare taxa:

Recently documented or poorly surveyed rare species for which risk of extirpation is potentially high (e.g. few known occurrences) but insufficient data exist to conclusively assess distribution and status. *criteria only qualifies for Priority 3 level SGCN*

Notes: proposed endangered 2014; only 1 known population; restricted to northern Maine and habitat specialized but still relatively un-surveyed; absent at several seemingly appropriate locales

Historical: NA

Culturally Significant: NA Professional Discretion:

Current criteria ranked *Boloria frigga saga* as SGCN priority 2, however, species should qualify as SGCN priority 1 based on professional discretion.

Justification: Proposed endangered 2014; only one known population

Habitats Assigned to Frigga Fritillary:

Formation Name Peatland

Macrogroup Name Northern Peatland & Fens

Habitat System Name: Boreal-Laurentian Bog **Primary Habitat** Notes: where host plant (Salix pedicillaris or

Betula pumila) present

Stressors Assigned to Frigga Fritillary:

Stressor Priority Level based on Severity and Actionability

	Moderate Severity	High Severity
Highly Actionable	Medium-High	High
Moderately Actionable	Medium	Medium-High
Actionable with Difficulty	Low	Low

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IUCN Level 1 Threat Other Options

IUCN Level 2 Threat: Lack of knowledge

Severity: Moderate Severity Actionability: Highly actionable

Notes: Lack of comprehensive survey effort and monitoring to identify additional occurrences and status/trends of

individual populations

IUCN Level 1 Threat Pollution

IUCN Level 2 Threat: Agricultural and Forestry Effluents

Severity: Moderate Severity **Actionability:** Highly actionable

Notes: Pesticide spraying and potential aerial drift (e.g. Spruce Budworm control)

IUCN Level 1 Threat Biological Resource Use

IUCN Level 2 Threat: Hunting and Collecting Terrestrial Animals

Severity: Moderate Severity **Actionability:** Moderately actionable

Notes: Potential pressure by rare butterfly collectors; population level impacts likely negligible unless collecting is intense

IUCN Level 1 Threat Climate Change and Severe Weather

IUCN Level 2 Threat: Habitat Shifting or Alteration

Severity: Moderate Severity **Actionability:** Actionable with difficulty **Notes:** Species is at southern range edge and is a northern peatland specialist

Species Level Conservation Actions Assigned to Frigga Fritillary:

None. Only species specific conservation actions that address high (red) or medium-high (orange) priority stressors are summarized here.

Conservation Actions Associated with the Peatland Lepidoptera Guild:

Conservation Action Category: Species Management Biological Priority: critical

Prepare occurrence maps and pesticide spray consultation guidelines for rare Lepidoptera and distribute to strategic partners including Maine Bureau of Pesticides Control.

Stressor(s) Addressed By This Conservation Action

Agricultural and Forestry Effluents

Broad Taxonomic Group Conservation Actions:

Additional relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-1.

Habitat Based Conservation Actions:

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.

Type: new